



[About](#) | [Meetings](#) | [Bulletin](#) | [Resources](#)

[View this email in your browser](#)

ECA Update June 10, 2016

Liquid waste processing site completed at SRS

Augusta Chronicle

State: LANL violations warrant civil penalties

Santa Fe New Mexican

Skills Gap Concerns Come to the Fore in Competition to Manage Nuclear Weapons Lab

National Defense Magazine

DOE Hanford leader to leave, Shoop to be new manager

Tri-City Herald

Citizens Advisory Board addresses K-area and long-term nuclear storage at SRS

Aiken Standard

2016 National Cleanup Workshop



Upcoming Events

Visit cleanupworkshop.com

Draft Agenda Now Online

June 2016

23

**Idaho National
Laboratory
EM SSAB Meeting**

Advanced Nuclear Reactor Framework Needed, Industry Says

BNA: Energy and Climate Report

DRAFT VISION AND STRATEGY FOR THE DEVELOPMENT AND DEPLOYMENT OF ADVANCED REACTORS

DOE-NE

Liquid waste processing site completed at SRS

Augusta Chronicle

June 7, 2016

[LINK](#)

Construction is officially complete on a facility to process 90 percent of the radioactive liquid waste stored at Savannah River Site, the U.S. Department of Energy reported Tuesday, although its starting date in 2018 is not keeping critics from squawking.

John Raeth leads a class of newly hired Savannah River Nuclear Solutions operators. It will take about two years of classroom and on-the-job training for the new hires to become fully qualified operators at Savannah River Site.

John Raeth leads a class of newly hired Savannah River Nuclear Solutions operators. It will take about two years of classroom and on-the-job training for the new hires to become fully qualified operators at Savannah River Site. That's because the department had just announced the arrival of 6 metric tons of additional radioactive material at the site from Japan. The Japanese plutonium is scheduled for dilution, packaging, shipping and storage in New Mexico by the National Nuclear Security Administration.

SRS' biggest construction project, the mixed-oxide fuel plant, is still years from completion. It is designed to turn weapons-grade plutonium into fuel for commercial reactors. The Japanese plutonium isn't suited for conversion to fuel, the Energy Department said. Besides, the administration wants to shift to

August 2016

11

**Third Annual
Intermountain
Energy Summit
Idaho Falls, ID**
[Visit website](#)

September 2016

14

**Save the Date:
House Nuclear Cleanup
Caucus
Capitol Hill**

November 2016

16-18

**INVITATION ONLY
Save the Date: 2016
Intergovernmental
Meeting
New Orleans, LA**

FOLLOW US



dilution and storage for all of the SRS plutonium, halting construction of the MOX facility midway.

The now-complete Salt Waste Processing Facility, which had been under construction since 2012, will handle liquid waste rather than the enriched plutonium. It will increase the processing of 36 million gallons of high-level waste stored in tanks on the site left over from the manufacturing of nuclear weapons that ended more than three decades ago.

The contractor started in 2012 and wrapped up its work in April, but the Energy Department spent the next 30 days checking it. That finish was eight months and \$60 million better than original projections.

“While construction work is now complete, we are pushing forward to reach our shared goal of getting this facility into operation by 2018,” said Jack Craig, the department’s SRS manager.

The next two years will be devoted to testing the facility and training workers.

SRS announced Tuesday that it has selected 80 operations employees who will undergo two years of training for jobs around the site. They were hired to keep the size of the workforce constant because half of existing employees will become eligible for retirement over the next five years.

It also has taken on 42 interns as part of its education program to develop future workers.

State: LANL violations warrant civil penalties

Santa Fe New Mexican

June 8, 2016

[LINK](#)

SUBSCRIBE

Visit EnergyCa.Org
Find the most recent *Bulletin*
[here.](#)

The state has issued a notice of violation to Los Alamos National Laboratory that it has violated its hazardous waste permit and should expect to face civil penalties for failing to properly handle a number of hazardous waste drums or correct issues.

The 12 violations were discovered as a result of a June 13, 2015, inspection by the New Mexico Environment Department that found open waste containers, including three holding ethyl acetate and acetonitrile, odorless and translucent chemicals. Other violations included failure to label containers as hazardous waste, failure to note the type of contaminant within certain drums and failure to properly package waste drums containing free liquids. The report also notes improperly set up waste receptacles for newly generated waste that were often too far from the waste-generating location.

In addition, LANL had 10 incomplete emergency contact sheets and had not shared its emergency planning documents with local first responders.

The violation notice goes on to say that “failure to promptly complete appropriate corrective measures associated with defects and deterioration” is also a violation of the waste management permit the lab holds with the state under the Resource Conservation and Recovery Act.

Some of these violations overlap with findings of an annual self-inspection released by LANL in December. That inspection found 421 instances of noncompliance, including drums containing toxic, reactive chemicals without labels and hazardous waste drums turned wrong-side up.

The state’s notice of violation coincides with an inspection conducted earlier this year by the Defense Nuclear Facilities Safety Board, an independent federal oversight body. Its report found that aging and unrepaired infrastructure at the lab’s plutonium worksite, PF-4, would not withstand or protect the surrounding community from a seismic disaster should an earthquake occur along the fault lines that run under the site.

A review of the site conducted by the National Nuclear Security Administration in November and released in mid-May revealed the lab had been docked award points for halted cleanup work at Area G and management shortcomings, including unconventional whistleblower protections. The existing issues led the NNSA to inform the lab in December that its contract would be put up for bid when it expires, a time frame extended by one year to allow for the bidding process and management transition.

The report, however, indicated the lab had made many improvements and would receive 74 percent of a total possible award for fiscal year 2016.

“The majority of the potential violations identified in last year’s annual Resource Conservation and Recovery Act inspection have already been addressed or are being addressed by a corrective actions process,” a spokesman for the lab said Wednesday.

According to the notice of violation, the Environment Department was informed by the lab of corrective actions underway in March, but some improvements still fell short.

Lab managers were notified through the June 1 letter that further lapses could result in legal action or a \$10,000-per-day fine.

The department informed the lab that because of the lab’s “past history of noncompliance” and the nature of violations, a civil penalty would also be issued.

The Environment Department did not respond to requests for comment on what that fine might be or when the lab is expected meet compliance.

Skills Gap Concerns Come to the Fore in Competition to Manage Nuclear Weapons Lab

National Defense Magazine

June 9, 2016

[LINK](#)

One of the nation's largest nuclear weapons laboratories is seeking contractor bids to manage its day-to-day operations. The competition for the Sandia National Laboratories deal could cause a shakeup as the lab has been run by the same contractor — Lockheed Martin Corp. — for 23 years.

Sandia is one of three major nuclear weapons labs under the Department of Energy's National Nuclear Security Administration. It has a nearly \$3 billion annual operating budget and a workforce of 11,000 in Albuquerque, New Mexico.

One of the Pentagon's top contractors, The Boeing Co., announced last month it plans to challenge Lockheed for the Sandia work, and has lined up a team of partner companies such as Battelle and major universities — Texas A&M, the University of Texas and the University of New Mexico — to bolster its bid. Boeing declined to provide details on the arrangement. "We are not commenting on the specifics of how we are organized at this time because this information is competition sensitive," said Boeing spokesman Jerry Drelling. The NNSA issued a final request for proposals May 18 and a contract decision is expected later this year or early 2017.

Lockheed's current contract expires April 30.

Sandia is what is known as a "government-owned, contractor-operated" facility where the focus is the maintenance of the nation's nuclear stockpile. The contractor that operates the lab gets paid a fee, anywhere from \$25 million to \$27 million a year. By the standards of many Pentagon service contracts, it is not big money, but the stakes are high nonetheless because of the prestige associated with running a nuclear weapons lab. For the labs, having a team of universities in its management ranks offers the access to much needed fresh talent in science and engineering disciplines.

The universities decided to join forces with Boeing in part because they want to open up channels for their graduates to work in government. It is no secret that the U.S. government faces a shortage of advanced technical talent. A skills gap in the nation's nuclear enterprise is becoming a growing concern, said Scott Sudduth, assistant vice chancellor and director of federal relations at the Texas A&M University System. "All the universities on this team, we are a large pipeline to the workforce at Sandia. A lot of our graduates work there. We've done a lot of collaboration." Texas A&M officials have been positioning the school for a role in the Sandia bid since 2012.

The University of California System for years has partnered with Bechtel to manage the Los Alamos National Laboratory. Universities are a "powerful component regarding the pipeline of talent that the labs will need," said David Daniel, deputy chancellor of the University of Texas System.

"Research and innovation are critical to the labs," he said in an interview. Sandia and its sister nuclear labs Los Alamos and Lawrence Livermore are under pressure to step up their technical skills. Los Alamos and Livermore are responsible for the nuclear explosives package, whereas Sandia specializes in the integration of weapons with delivery systems.

"Increasingly the ability to test components, especially nuclear weapons, is more limited," said Daniel. "Advanced simulations and computer modeling take on growing importance." The national labs are "particularly challenged because of the need to hire people who are qualified and also are U.S. citizens that can get clearances," he noted. The majority of graduates at colleges in engineering today are not U.S. citizens. It is also difficult to attract talent willing to move to New Mexico. "This is an increasing problem in the federal complex."

Having a window into the government's technical challenges benefits the universities that would be part of the Sandia management team, noted Dale Klein, associate vice chancellor for research at the University of Texas System.

Klein is a former Pentagon official who dealt with nuclear, chemical and biological defense issues. "Universities have a large talent base but they don't

always know the problems of the labs or the problems the government is trying to solve,” he told National Defense. “This will give us an opportunity to cross fertilize.”

UT Chancellor William McRaven, a retired Navy admiral and former special operations commander, is trying to position the school as a hotbed of national security talent. “He wants our students and faculty to be more engaged on national issues,” said Klein. “The nuclear world is complicated. There are valuable technologies that come out of universities.”

Besides Lockheed and Boeing, other bidders are still weighing their options. The NNSA website posted the names of several companies that have filed requests for information and agreed to be listed. Nuclear lab management contracts typically are awarded in five-year increments. When Sandia opened in 1949, it was run by AT&T under a public service no-fee contract. In 1993, defense contractor Martin Marietta took over, and the company later was acquired by Lockheed.

Lockheed Martin spokesman Matt Kramer said the company intends to submit a bid for the Sandia management and operations contract. “We’re proud of our 23-year partnership with the Department of Energy’s National Nuclear Security Administration.”

DOE Hanford leader to leave, Shoop to be new manager

Tri-City Herald

June 8, 2016

[LINK](#)

One of Hanford’s two top local Department of Energy leaders is expected to leave to take a job at DOE headquarters in Washington, D.C.

Stacy Charboneau, manager of the Richland Operations Office since the end of 2014, would be replaced at Hanford by Doug Shoop, currently deputy manager of the office.

The move depends on a proposed reorganization of the DOE Office of Environmental Management, which oversees work at Hanford and DOE's other environmental cleanup work across the nation. Charboneau would serve in a proposed new position, overseeing field operations as an associate principal deputy assistant secretary.

No date for the change in leadership at the local Hanford office has been set, with the headquarters' reorganization pending.

The reorganization would not affect the leadership of Hanford's other DOE office, the Office of River Protection, led by Kevin Smith.

Shoop served as acting manager of the Richland Operations Office for about six months in 2014 until Charboneau was named as manager. He has been deputy manager of the office since 2008.

Before that he was assistant manager for safety and engineering for the Richland Operations Office.

In his 30 years of management and technical experience, he also has worked for Fluor Hanford, Westinghouse Hanford Co. and the Idaho National Environmental Engineering Laboratory. He previously worked in academia, conducting clinical research. His master's degree is in industrial hygiene/environmental engineering.

Charboneau announced her proposed new position at the Hanford Advisory Board meeting in Richland on Wednesday, joking about how widespread the rumor was already that she was leaving and would be replaced by Shoop.

"You are going to be in a position to make a difference," said board member Pam Larsen.

Having environmental cleanup experience in the field will be a plus, said board member Susan Leckband.

Charboneau has experience at both the Hanford Richland Operations Office and the Office of River Protection, which have cleanup projects that touch most aspects of work at the DOE sites under the new Headquarters' field office, she said.

The field office will have responsibility for about a dozen DOE sites, including both Hanford offices, and field work at sites in Savannah River, S.C.; Idaho; Oak Ridge, Tenn.; and Los Alamos and Carlsbad, N.M.

The proposed reorganization chart shows three associate principal deputy assistant secretary positions under the Office of Environmental Management's top leadership, the assistant secretary and principal deputy assistant secretary.

The three positions would have Frank Marcinowski leading regulatory and policy affairs and Candice Trummell leading corporate services, as well as Charboneau leading field operations. Charboneau would be the third highest-ranking person in the Office of Environmental Management.

Marcinowski now holds his new proposed position in an acting capacity, and Trummell is the deputy chief of staff for the deputy secretary of energy.

Charboneau has worked at Hanford for about 22 years, with leadership positions at both the Office of River Protection and the Richland Operations Office.

The Office of River Protection is responsible for underground tanks holding radioactive waste from the past production of nuclear weapons and the vitrification plant being built to treat the waste for disposal.

The Richland Operations Office is responsible for all other Hanford cleanup, including demolishing contaminated buildings, digging up waste burial grounds and cleaning up groundwater, and for overall management of the site.

Charboneau's work at the Office of River Protection included serving as deputy manager and chief operating officer of the Office of River Protection. Among the many Hanford projects she has worked on at a management or director level are the tank farms, the Plutonium Finishing Plant and the K Basins.

The Office of Environmental Management reorganization is partly in response to a report by the office's Accident Investigation Board, which called for strengthened oversight after a radiological release at the Waste Isolation Pilot Plant in New Mexico in February 2014 that contaminated workers.

The latest list of high-risk projects from the Governmental Accountability Office called for resources to be committed to project management problems.

Charboneau said the reorganization also was based on feedback from DOE environmental management employees, and recognizes that the field is where the actual work is done.

The proposed change is planned to increase coordination and interaction between cleanup sites and headquarters and to strengthen support to the sites where cleanup work is planned and performed, according to a May 26 presentation by Monica Regalbuto, the cleanup assistant secretary, and Mark Whitney, her principal deputy assistant secretary.

Advisory board member Jerry Peltier said the promotion for Charboneau is well deserved, but questioned the timing of the proposed reorganization, with just five months left before a new administration takes office and appoints new DOE officials.

The DOE Office of Environmental Management was without an assistant secretary for four years until Regalbuto was confirmed for the position in

August, Charboneau said. It took so long to get to the point that the office could be reorganized that Regalbuto and Whitney did not want to miss the opportunity to act, she said.

Charboneau's husband, Briant Charboneau, director of the One-System Division at the Hanford DOE Office of River Protection, also has been offered a job at DOE headquarters and will be leaving Hanford.

Citizens Advisory Board addresses K-area and long-term nuclear storage at SRS

Aiken Standard

June 7, 2016

[LINK](#)

The Nuclear Materials Committee of the Citizens Advisory Board convened Tuesday evening and tabled issues from Savannah River site, including K-area plutonium containers, long-term storage of spent nuclear fuels and the board's opposition to proposed acceptance of a shipment of German spent nuclear fuel.

K-area is the processing and storage area for excess plutonium at Savannah River Site, or SRS. That includes National Nuclear Security Administration, or NNSA, monitored plutonium that is meant for the Mixed Oxide Fuel Fabrication facility. That plutonium, about 7 metric tons of the overall 13 metric tons, is planned to be processed into fuel for commercial nuclear reactors under a non-proliferation agreement with Russia.

The K-area storage includes about 5,000 containers of plutonium. According to Allen Gunter of the Department of Energy at Savannah River, each container holds about 300 grams of the nuclear material. The 6 metric tons not under the MOX agreement is planned to be downblended, beginning as early as September.

Gunter said the downblending will occur in the same glove box that the Energy Department conducts monitoring and testing of the structural integrity of the containers in storage. That surveillance program looks for corrosion or other problems by testing each layer of six storage containers annually.

According to Gunter, the down blended material will fill 20,000 of those containers planned to be transported to New Mexico for long-term interment at the Waste Isolation Pilot Plant, or WIPP. Public comments expressing opposition to material storage, especially considering proposed shipments from Germany. The comments and concerns pushed the committee beyond its time limit. A special meeting is expected to be established and announced through the Federal Register.

Editor's note: A correction was made to this story. The story referred to 13 million tons of plutonium at K-area but the correct amount is 13 metric tons.

Advanced Nuclear Reactor Framework Needed, Industry Says

BNA: Energy and Climate Report

June 8, 2016

[LINK](#)

June 8 — The Nuclear Regulatory Commission needs to develop a regulatory framework specifically for advanced nuclear reactors and review applications for them efficiently, vendors that are developing the next-generation nuclear reactors told the agency.

The current regulatory process for all 100 operating nuclear reactors in the U.S. is meant for light water reactor technology. Companies developing advanced non-light reactors say the current framework doesn't apply to their technologies, which are cooled by substances other than water—such as sodium, gas, molten salt and lead—and have safer profiles than existing reactors.

According to Eric Loewen, chief consulting engineer at GE Hitachi Nuclear Energy, which is building the PRISM, a high energy sodium-cooled reactor, the current regulatory framework “is unworkable for any advanced reactor.”

Speaking at a June 8 Department of Energy and NRC workshop in Rockville, Md., Loewen said the current NRC processes have led to cost and schedule uncertainties, making these advanced nuclear projects difficult to complete. In fact, GE has been working on the PRISM reactor since 1985, when it first received DOE funding.

He said that the NRC also needs to expedite its advanced reactor design criteria, which the agency issued in a draft form in April for public comment, and regulatory guidance for advanced reactors.

Jennifer Uhle, director of NRC's Office of New Reactors, told Bloomberg BNA June 8 that the NRC can review non-light water reactors under its current light water reactor framework, but it is considering developing a new non-light water reactor framework that would be more efficient. So far the agency hasn't received any applications for these types of reactors.

The most mature advanced non-light water technologies—sodium-cooled and gas-cooled reactors—are still at least 15 years away from the commercial market, John Kelly, DOE's deputy assistant secretary for nuclear reactor technologies, told Bloomberg BNA June 8. Other advanced non-light water technologies, such as molten salt reactors, are at least 20 years away from the market, Kelly said.

Need for More DOE Funding

DOE is providing funding for these reactor designs. DOE awarded X-energy and Southern Company Services competitive advanced non-light water grants in January for X-energy's pebble bed high temperature gas-cooled and Southern's molten-chloride fast reactor designs.

“DOE funding for industry is definitely needed, alongside funding for test facilities,” Rita Baranwal, director of technology development at Westinghouse Electric Co., said at the workshop.

Additionally, the industry and government need to work together more closely to encourage innovation in advanced reactor designs, Baranwal said. She commended the work DOE has done to establish the Gateway for Accelerated Innovation in Nuclear (GAIN) initiative, which aims to provide the nuclear industry with access to technical, regulatory and financial support to speed the commercialization of new advanced nuclear reactor designs.

“The climate we’re in right now is very risk averse. That climate is the complete antithesis of what we need to be innovative,” she said.

Next Steps at NRC, DOE

The NRC is working on finalizing its implementation of near-term implementation strategies for advanced reactors (those the NRC can implement in the next five years) by September, Uhle said.

Concurrently, Uhle said, the NRC will formally issue its vision and strategy document for advanced non-light water nuclear reactors for public comment in August, with a goal of finalizing it by early 2017. She said the intention of the document is to ensure NRC is ready to review and regulate non-light water reactors effectively.

The NRC also will finalize its 5- to 10-year and 10-plus-year implementation strategies for advanced reactors by February 2017, Uhle said.

While no companies have had pre-application meetings or have submitted applications for non-light water reactors yet to the NRC, she said she encourages companies to come to pre-application meetings at least two years ahead of when they plan to submit an application. This is because the NRC has to include whether there are applications coming into the agency in its budget, which it creates two years in advance. Currently, there are only two full-time staff at NRC to review non-light water reactors, she said.

Also, the DOE plans to finalize its vision and strategy document for advanced non-light water nuclear reactors in the next year, she said.

**DRAFT VISION AND STRATEGY FOR THE DEVELOPMENT AND
DEPLOYMENT OF ADVANCED REACTORS**

DOE-NE

The U.S. Department of Energy, with interagency and stakeholder input, has developed a vision and strategy for supporting the development and ultimate deployment of advanced reactor technology as part of a broader federal commitment to clean energy and national security. The unpublished draft of the document, Vision and Strategy for Development and Deployment of Advanced Reactors, is posted [here](#).
